

## **Wastewater Strength and Treatment: Soil-Based Systems and Innovative/Alternative Solutions**

Full Day Seminar led by Dr. Sara Heger  
At Vermont Technical College, Randolph Center  
On Wednesday, October 4<sup>th</sup>, 2017 from 8:00am to 5:00pm

### **Objective and Content**

Vermont Technical College and the Agency of Natural Resources in association with the National Onsite Wastewater Recycling Association (NOWRA) and the Yankee Onsite Wastewater Association (YOWA) are pleased to announce a full day of training on wastewater strength and treatment. The course is aimed at all wastewater system designers, installers, and operators involved with on-site and soil-based wastewater systems of any size.

The goal of this course is to provide wastewater professionals with greater understanding of wastewater properties and the processes of onsite and soil-based treatment. You will learn about wastewater characteristics, analysis, and classification, before going on to consider the treatment processes occurring in septic tanks, innovative/alternative (I/A) systems, and soil. Examples and case studies that illustrate the links between theory and practice will be used throughout.

### **Instructors**



Dr. Sara Heger is an engineer, researcher, and instructor in the Water Resources Center at the University of Minnesota. Sara is NOWRA Education Chair and serves on the NSF International Committee on Wastewater Treatment Systems. Since 1999, she has been providing technical advice and training on wastewater treatment to homeowners, communities, professionals, and local government. Her research includes treatment of high strength milk house wastewater, rest stop septic systems, and community on-site systems.

Dr. Graham Bradley is a hydrogeologist and soil geologist with the Vermont Drinking Water and Groundwater Protection Division. Graham has 25 years of experience as a consultant, researcher, and instructor in contaminant hydrogeology and soil geology. He is responsible for innovative/alternative (I/A) system approvals & designer training.

Mr. Jared Willey is co-owner of a service company that specializes in solving wastewater treatment problems and maintaining I/A systems. As a former wastewater treatment plant operator, with an Ecology & Environmental Technology ASS degree, Jared evaluates bacterial function as well as mechanical and electrical performance.

**Cost:** \$100 **Vermont Designers Continuing Education Credits:** 6 non-soil and 2 soil (8 total).

**Contacts:** [mhebert@vtc.vsc.edu](mailto:mhebert@vtc.vsc.edu) (registration) [grahame.bradley@vermont.gov](mailto:grahame.bradley@vermont.gov) (course content)

**Registration:** <https://events.vtc.edu/Register/SepticSystemsOct42017>